48. (New claim) The method of claim 47, wherein the non-organic liquid comprises water.

49. (New claim) The method of claim 47, wherein the non-organic liquid comprises a detergent.

50. (New claim) The method of claim 49, wherein the detergent comprises ionic or non-ionic surfactants.

51. (New claim) The method of claim 50, wherein the ionic or non-ionic surfactants are selected from the group consisting of Triton X-100, Tween, Brij, sodium dodecylsulfate and saponin.

52. (New claim) The method of claim 47 wherein the embedding medium comprises paraffin wax.

53. (New claim) A method of removing embedding medium from a biological sample, the method comprising the steps of:

applying a non-organic liquid to a biological sample; and

heating the biological sample containing embedding medium to a temperature at or above the embedding medium's melting point.

54. (New claim) The method of claim 53, wherein the non-organic liquid comprises water.

55. (New claim) The method of claim 53, wherein the non-organic liquid comprises a detergent.

56. (New claim) The method of claim 55, wherein the detergent comprises ionic or non-ionic surfactants.



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57. (New claim) The method of claim 56, wherein the ionic or non-ionic surfactants are selected from the group consisting of Triton X-100, Tween, Brij, sodium dodecylsulfate and saponin.

58. (New claim) The method of claim 53, wherein the embedding medium is paraffin wax.

59. (New claim) An automated method of cell conditioning for deparaffinized or non-embedded biological samples, the method comprising the steps of:

applying at least one cell conditioning reagent; and

applying heat to the biological sample sufficient to effectively expose the epitope and/or target for subsequent detection.

60. (New claim) The automated method of claim 59, wherein the at least one cell conditioning reagent is selected from the group consisting of de-ionized water, citrate buffer (pH 6.0-8.0), Tris-HC1 buffer (pH 6-10), phosphate buffer (pH 6.0-8.0), SSC buffer, APK Wash™, acidic buffers or solutions (pH 1-6.9), basic buffers or solutions (pH 7.1-14), mineral oil, Norpar, canola oil, and PAG oil.

61. (New claim) The automated method of claim 59, wherein the at least one cell conditioning reagent contains ionic or non-ionic surfactants selected from the group consisting of Triton X-100, Tween, Brij, sodium dodecylsulfate and saponin.

62. (New claim) The automated method of claim 59 wherein the non-embedded biological samples comprise liquid, cytospin, or thin-layer cell preparations.

63. (New claim) An automated method of simultaneously removing embedding medium from a biological sample while providing cell conditioning, the method comprising the steps of:



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applying deparaffinizing and cell conditioning reagent; and

applying heat to the biological sample to effectively melt the embedding medium and to sufficiently expose the epitope and/or target for subsequent detection.

64. (New claim) The automated method of claim 63, wherein the step of applying heat includes heating the biological sample to temperatures ranging from about 37 °C to about 100 °C.

65. (New claim) The automated method of claim 63, wherein the deparaffinizing and cell conditioning reagent is selected from the group consisting of de-ionized water, citrate buffer (pH 6.0-8.0), Tris-HCl buffer (pH 6-10), phosphate buffer (pH 6.0-8.0), SSC buffer, APK Wash™, acidic buffers or solutions (pH 1-6.9), basic buffers or solutions (pH7.1-14) mineral oil, Norpar, canola oil, and PAG oil.

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66. (New claim) The automated method of claim 63 wherein the deparaffinizing and cell conditioning reagent contains ionic or non-ionic surfactants selected from the group consisting of Triton X-100, Tween, Brij, sodium dodecylsulfate and saponin.

67. (New claim) An automated method of removing embedding media from a biological sample and subsequently providing cell conditioning, the method comprising the steps of:

heating the biological sample containing embedding medium to a temperature at or above the embedding medium's melting point;

applying a non-organic liquid to the biological sample to separate the liquified embedding medium from the biological sample, wherein said non-organic liquid has a density greater than that of the liquefied embedding medium;

rinsing away said liquefied embedding medium from the biological sample;

applying at least one cell conditioning reagent; and

applying heat to the biological sample sufficient to effectively expose the epitope and/or target for subsequent detection.



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68. (New claim) The method of claim 67 wherein said embedding medium is paraffin.

69. (New claim) The method of claim 67 wherein the non-organic liquid comprises water.

70. (New claim) The method of claim 67 wherein the non-organic liquid comprises a detergent.

71. (New claim) The method of claim 70 wherein the detergent comprises ionic or non-ionic surfactants.

72. (New claim) The automated method of claim 71 wherein the ionic or non-ionic surfactants are selected from the group consisting of Triton X-100, Tween, Brij, sodium dodecylsulfate and saponin.

73. (New claim) The method of claim 67 wherein the at least one cell conditioning reagent is selected from the group consisting of de-ionized water, citrate buffer (pH 6.0-8.0), Tris-HC1 buffer (pH 6-10), phosphate buffer (pH 6.0-8.0), SSC buffer, APK Wash™, acidic buffers or solutions (pH 1-6.9), basic buffers or solutions (pH 7.1-14), mineral oil, Norpar, canola oil, and PAG oil.

74. (New claim) The automated method of claim 67, wherein the steps of applying heat includes heating the biological sample to temperatures ranging from about 37 °C to about 100 °C.

Respectfully submitted,

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Amir N. Penn
Registration No. 40,767



McDonnell Boehnen Hulbert & Berghoff
300 South Wacker Drive
Chicago, Illinois 60606